

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for transmitting information in a communication channel of a wireless communication system, the method comprising:

dividing the communication channel into a plurality of time slots of equal duration; and
sub-dividing, on other than a time division basis, each of the plurality of time slots to comprise two or more sub-slots,

wherein each of the two or more sub-slots is capable of carrying a separate transmission within the communication channel and wherein a transmission within the communication channel is capable of being carried in a variable number of contiguous sub-slots and a variable number of contiguous time slots.

2. (Original) The method according to claim 1, wherein each of the two or more sub-slots within a particular time slot is separately transmitted according to a code division multiple access scheme.

3. (Original) The method according to claim 2 wherein, in any one of the plurality of time slots, each of a plurality of transmissions are separately coded and carried in a separate sub-slot simultaneously in such time slot.

4. (Original) The method according to claim 3 wherein each of the plurality of transmissions correspond to a separate user of the wireless communication system.

5. (Original) The method according to claim 3, wherein each of the plurality of transmissions correspond to separate transmissions of a single user of the wireless communication system.

6. (Original) The method according to claim 1, wherein each of the two or more sub-slots within a particular time slot corresponds to a different frequency according to a frequency division multiple access scheme.

7. (Currently Amended) The method according to claim 1, wherein a single transmission can be carried in one or more contiguous sub-slots in one or more contiguous time slots.

8. (Original) The method according to claim 1, wherein the communication channel comprises time slots each having a duration of 1.25 milliseconds and wherein each of the time slots comprises at least two sub-slots.

9. (Original) The method according to claim 1, further comprising:
transmitting a separate control channel for each separate transmission carried in the communication channel.

10. (Original) The method according to claim 9, wherein the duration of the separate control channel is dependent upon the number of sub-slots carrying the corresponding transmission in the communication channel.

11. (Original) The method according to claim 9, wherein the communication channel is a forward packet data channel (F-PDCH), wherein information is transmitted as encoder packets in the forward packet data channel (F-PDCH), and wherein the separate control channel is a forward secondary packet data control channel (SPDCCH).

12. (Original) The method according to claim 11, wherein the forward secondary packet data control channel (SPDCCH) includes:

a sub-slot start field for identifying a sub-slot within a time slot in which a particular transmission starts; and

a sub-slot count field for identifying the total number of sub-slots that carry the particular transmission.

13. (Original) The method according to claim 11, wherein a plurality of forward secondary packet data control channels (SPDCCH) correspond to a plurality of simultaneous transmissions on the forward packet data channel (F-PDCH), and wherein each of the plurality of secondary packet data control channels (SPDCCH) identifies a sub-slot start position within a time slot in which a particular transmission starts.

14. (Currently Amended) A method for transmitting information in a communication channel of a wireless communication system, the method comprising:

dividing the communication channel into a plurality of time slots of equal duration according to a time division multiple access scheme; and

sub-dividing each of the plurality of time slots to comprise two or more sub-slots according to a code division multiple access scheme,

wherein each of the two or more sub-slots is capable of carrying a separately coded transmission within the communication channel so that multiple simultaneous transmissions can occur in any given time slot,

and wherein a transmission within the communication channel is capable of being carried in a variable number of contiguous sub-slots and a variable number of contiguous time slots.

15. (Currently Amended) A method for transmitting information in a communication channel of a wireless communication system, the method comprising:

time multiplexing a plurality of time slots of equal duration in the communication channel; and

code multiplexing two or more sub-slots within each of the plurality of time slots,

wherein a transmission within the communication channel is capable of being carried in a variable number of contiguous sub-slots and a variable number of contiguous time slots.

16. (Currently Amended) The method according to claim ~~14~~15, wherein each of the two or more sub-slots is capable of carrying a separately coded transmission within the communication channel so that multiple simultaneous transmissions can occur in any given time slot.

17. (New) The method according to claim 1, wherein bandwidth in the communication channel is allocated on a fractional basis to carry a plurality of transmissions using a combination of a variable number of contiguous sub-slots and a variable number of contiguous time slots.

18. (New) The method according to claim 1, wherein transmissions within the communication channel include two or more transmissions selected from the group consisting of

new transmissions, retransmissions, acknowledgements (ACKs), negative acknowledgements (NACKs), and multi-level ACK/NACK messages.

19. (New) The method according to claim 18, wherein a multi-level ACK/NACK message corresponds to multiple transmissions that end within the same time slot.
